

Herald Tribune

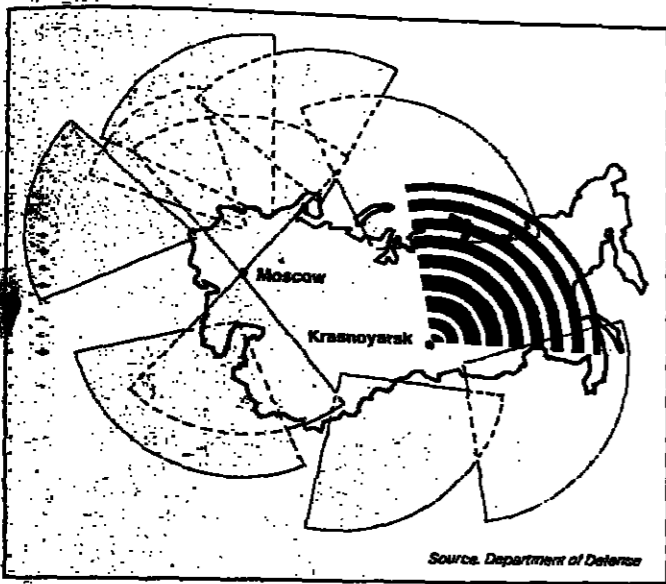
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Gorbachev Still Sees SDI Gap

Soviet Leader's TV Report Hints at Doubts on U.S. Stance



Unlike other Soviet radar systems shown on this map, the radar being built near Krasnoyarsk is far from any borders, and does not point outward as the ABM Treaty requires.

U.S. Says ABM Extension Depends on Soviet Radar

WASHINGTON — The United States is demanding that the giant Soviet early-warning radar being constructed near Krasnoyarsk in central Siberia be modified or torn down before any new understanding is reached on the 1972 anti-ballistic missile treaty, according to American sources.

By Gary Lee
Washington Post Service
MOSCOW — Mikhail S. Gorbachev indicated Monday that important differences remained between him and President Ronald Reagan over the Strategic Defense Initiative following their meeting in Washington last week.

In a nationally televised report to the Soviet people on his meeting President Reagan reaffirmed the U.S. commitment to its NATO allies. Page 6.

Mr. Gorbachev hinted that members of the Kremlin leadership were not fully convinced by Mr. Reagan's stance during the summit talks. He said that the delegation carefully analyzed whether there were changes in the Reagan administration's approach to the Soviet Union during the talks.

Some Senate critics of the newly signed treaty on intermediate-range nuclear forces, or INF, have talked of amending the agreement during the ratification process to require that Krasnoyarsk be destroyed before the pact takes effect, congressional sources said.



Israeli soldiers detained a Palestinian in the Gaza town of Khan Yunis on Monday. Witnesses said the man was later found unconscious in an alley. Two Palestinians also died on the sixth straight day of violent demonstrations in the territory. Page 2.

Korea Reporters Protest Vote Coverage

SEOUL — More than 30 reporters employed by the South Korean government-owned television network held a sit-in Monday to protest against what they called biased news coverage of the presidential election.

Opposition candidates have warned that a popular uprising may ensue if Mr. Roh is declared the winner after Wednesday's election.

OPEC Reaches New Pact

Accord Excludes Iraq, Upholds Price of \$18

VIENNA — All the OPEC states except Iraq agreed late Monday to maintain their crude oil price at \$18 a barrel for the first half of next year and to limit output to 15.06 million barrels a day to defend it, delegates to the talks said.

Crude oil prices fell sharply earlier Monday amid market doubts that OPEC could hammer out an effective agreement to bolster prices and restrain production levels.

Kiosk Bomb Suspect Flown to Seoul

MANAMA, Bahrain (UPI) — A woman suspected of helping to blow up a Korean Air jet with 115 people aboard was being flown from Bahrain to Seoul on Monday, witnesses said.



Major Alain Mafart, convicted in the bombing of the Rainbow Warrior, has been flown to Paris from exile. Page 2.

Panamanian Seeks Soviets As New Ally

WASHINGTON — With his support among U.S. officials eroded, General Manuel Antonio Noriega, Panama's military leader, has begun more openly courting the Soviet Union, the Salvadoran guerrillas and others hostile to the United States, according to Reagan administration officials and a Nicaraguan defector.



Protests Mark ASEAN Summit Meeting in Manila
While President Corason C. Aquino of the Philippines welcomed ASEAN leaders to their first summit meeting since 1977, about 1,500 protesters marched in Manila on Monday to proclaim opposition to U.S. bases and to alleged U.S.-Japanese domination of Southeast Asia. The six ASEAN heads discussed the Vietnamese occupation of Cambodia and Indochinese refugees. Page 6.

The End of the Second Jazz Age

Youth and Wealth Were Idols of '80s Investment Craze

By William Glaberson
New York Times Service
NEW YORK — When the closing bell rang on Oct. 19, at the end of the worst day in the history of the New York Stock Exchange, a characteristically American craze came to an end.

It was a time when 29-year-olds were earning six-figure salaries on Wall Street. Multibillion-dollar companies were bought and sold like used cars. Everybody was "doing deals." And stocks seemed to go only up.

Special Report
New radars "see" farther. Sophisticated tools aid restorers in an Egyptian tomb. In Technology Quarterly. Pages 7-12.

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With Cow in Its Zoo, Dublin Prepares for Millennium
By Francis X. Clines
New York Times Service
DUBLIN — First of all, the cow imported last year from the ever-receding farmlands is doing well at the zoo — herself a celebration of the progress of this tough and friendly city.

truth of Dublin is rooted at least as much in imagination as in reality. "It's a damn good thing that people in this city finally want to feel good about themselves and celebrate."

OPINION

Gorbachev's Two Faces: Realities to Reckon With

By Anthony Lewis

BOSTON — Self-confident and charming, Defensive and truculent. The Mikhail Gorbachev who appeared in the United States was both those men. An image of Soviet leaders operating behind walls was shattered by this figure leaping out of his limousine to shake hands on a Washington street. What could show more self-confidence than a Russian ready to play by U.S. rules. He charmed even the cameras? He charmed even conservatives. But when he was asked about human rights, he bristled. "We're not going to let the Americans lecture us," he told a group of publishers and editors. "Why doesn't the American administration trust 280 million Soviet people who made their choice?"

When Mr. Gorbachev says that his people "made their choice in 1917," he is not likely to persuade most Americans. The Russian revolution was carried out by a small, disciplined minority. In our sense of democracy, the Soviet people never had a choice: a free election. The U.S. Constitution was written by a small elite group of men, but they took extraordinary steps to test public acceptance of their work. Each of the 13 states had its own convention to decide whether to ratify the Constitution, and some were closely divided. The day Mr. Gorbachev came to Washington, Dec. 7, was the 200th anniversary of the first state ratification, Delaware's.

Robert Kaiser, in the Washington Post.



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Don't Declare Open Season on Infant Parts

By Ellen Goodman

BOSTON — Any day now, Brenda Winner is going to give birth to an organ donor. This is a cold, but not inaccurate, way to describe the fate of the Winner's firstborn. The child is slated to become a source of rare and precious parts — a heart, a lung, a kidney, a liver perhaps — for other people's children. At the same time it is likely to become a source of an unsettling debate. Months ago, the California couple learned that the fetus was anencephalic. Most of its brain was missing. It could not think or feel and was doomed to die. But Brenda Winner chose to carry the fetus to term in the hope that its organs could be used. Using words that mirror the emotions of many donor families, they wanted something good to be wrested out of their tragedy.

MEANWHILE at Loma Linda. The doctors there took her off the respirator and declared her dead. They stayed within the letter of the law about brain death. They may do the same with the Winner baby. But that does not answer a main question. Should the babies be regarded as a new and welcome source of organs? Or should their use be seen as a dangerous precedent, a crack in the door that will permit the use of others who are not exactly, not legally, dead? Art Caplan, director of the Center for BioMedical Ethics at the University of Minnesota, supports the use of anencephalics. "I don't think these kids are dead," he says, "but would I take the organs out? Yes. There's no difference between taking the organs and taking them off the machine." As he sees it, the criteria for organ donation are twofold. The potential donor must be beyond any conscious life and unable to think or experience pain. Death must be imminent, and with 100 percent certainty. But others, Mr. Caplan acknowledges, are fearful

Letters intended for publication should be addressed to "Letters to the Editor" and contain the writer's signature, name and full address. Letters should be brief and are subject to editing. We cannot be responsible for the return of unsolicited manuscripts.

Islam Holds the Key to an Afghanistan Settlement

Selig S. Harrison's opinion column "A Chance to Serve Peace in Afghanistan" (Dec. 7) suffers from structural flaws and ignores established facts. As he argues, there is a chance — indeed a big one — to serve peace in Afghanistan, but it is essential to understand why this chance seems to be available now. The most important single reason is self-evident: the increasingly heavy toll of lives and material losses suffered by the Soviet Union as a result of the heroic, unwavering resistance put up by the Afghan guerrillas ever since the Red Army invaded the country in 1979. Since the first days of the Soviet occupation, it has been the Islamic resistance groups, commonly known as mujahidin, that have initiated, organized and led the actual fighting. It is these groups who have suffered most as a result of the Soviet aggression in Afghanistan. Without them, Afghanistan would have been turned into a vassal Communist country much like any one of the satellite regimes in Eastern Europe, if not a part of the Soviet Union itself, like the Soviet republics of Central Asia.

LETTERS TO THE EDITOR

course, a long and difficult process; but it must start sometime. It requires a profound change propelled by a fresh current of thought capable of changing world opinion, not unlike the philosophical movements that prepared the French and American revolutions in the 18th century. JOSE A. MESTRE, Gstaad, Switzerland. Gorbachev: Not Special "Is Gorbachev as 'Special' as Reagan Thinks He Is?" The answer to your Dec. 10 headline is no. Mikhail Gorbachev is a younger and smarter and not-to-be-trusted successor to previous Soviet leaders. A wolf in sheep's clothing. The signing of the missile treaty is strictly for economic and political reasons. Neither country can afford the missiles, and in this election year President Reagan cannot afford offending American voters. VIRGINIA L. ASKEW, Saanenmüser, Switzerland. Doug Macgregor's opinion column about how an economically sounder Soviet Union would represent an "even greater" military threat is frightening be-

cause the writer is a professor at West Point. ("Gorbachev Isn't About to Starve His Army," Dec. 4.) He demonstrates the spirit in which the West's military is educated. Mr. Macgregor uses the tactics of many columnists, making a flat statement as fact and deducing a thesis from it. The statement itself is presented as if it needed no proof. Mr. Macgregor's declares that the Soviet state is involved in a "long-term effort to dominate Eurasia." There is no historical foundation to this statement. It is generally accepted that Soviet policies in postwar Eastern Europe are comparable to the prewar West's cordon sanitaire — intended, in Russia's case, as a historically justified protection against invasion from the west. The Russian border is well to the east of where it was in 1914, before Russia lost to Germany in one world war and then won in the next one, recouping its losses. The Soviet record in Finland, in Austria, at the Chinese border and even in Afghanistan is one of defensive action and fear — if sometimes paranoid fear. The "threat" is mostly Made in West Point. H. KONING, London.

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Southeast Asians Agree To Tighten Trade Links

By Barbara Crosser
New York Times Service
MANILA — The leaders of six Southeast Asian nations opened their first summit meeting in a decade on Monday and called for greater economic cooperation among themselves and an end to the Vietnamese occupation of Cambodia.

Gorbachev Tops Reagan in U.S. Poll

By Richard Morin
Washington Post Service
WASHINGTON — Americans with a favorable view of Mikhail S. Gorbachev now outnumber those with a favorable opinion of President Ronald Reagan, although the summit meeting last week produced immediate but perhaps temporary political gains for Mr. Reagan and reversed sagging public confidence in his administration.



Backers of South Korean presidential candidate Kim Dae Jung brandishing banners and placards in a rally at Suwon, near Seoul, on Monday, as the long campaign nears its end.

President Opens Drive For Treaty Ratification

By David Hoffman
Washington Post Service
WASHINGTON — President Ronald Reagan began a campaign Monday for Senate approval of the treaty to eliminate intermediate-range nuclear forces that he signed last week with Mikhail S. Gorbachev, the Soviet leader. He said the elimination of missiles in Europe would not divorce the United States from its NATO allies.

Ceausescu Promises Pay Increases

By Our Staff From Dispatches
BUCHAREST — President Nicolae Ceausescu, admitting that Romania faced serious problems, combined pledges of pay increases for workers Monday with promises to maintain the high rates of industrial development that have triggered food shortages and unrest.

KOREA: TV Reporters Sit Down

(Continued from Page 1)
Rob's name on their absentee ballots.
The elder brother of a soldier allegedly killed by superior officers last week charged in a news conference that the beating resulted from the soldier's insistence on voting for Kim Dae Jung.

Backers of South Korean presidential candidate Kim Dae Jung brandishing banners and placards in a rally at Suwon, near Seoul, on Monday, as the long campaign nears its end.

DUBLIN: City Marks Millennium

(Continued from Page 1)
bridge so poignantly dappled with sun patches and the beggar teams of mother and child.
A visitor can easily wind up assuring Dubliners that there is a city needing few apologies as afterthought for such civilities as after-school tea in the front parlor of the Shelbourne, the grand hotel where the Irish revolutionaries composed their constitution.

President also called for efforts to redress the Soviet advantage in chemical weapons.

OPEC: Accord Upholds \$18 Price

(Continued from Page 1)
as fell \$1.10 a barrel to a 10-month low, before recovering slightly.
In London, North Sea Brent dropped by nearly \$1 to \$16.75 in spot trading from Friday's \$17.65. It was the first time since March that the European benchmark crude had traded below \$17.

NORIEGA: Search for Allies

(Continued from Page 1)
they were surprised to learn several weeks ago from Major Miranda that, in August, General Noriega told a Nicaraguan intelligence official he was prepared to supply arms to the Salvadoran rebels. Support for the government of El Salvador against the rebel forces is one of the cornerstones of U.S. policy in the region. Major Miranda, a defector, also suggested that General Noriega was providing intelligence information on American activities in Panama to the Sandinistas.

Soares Heads Delegation For Talks With Madrid

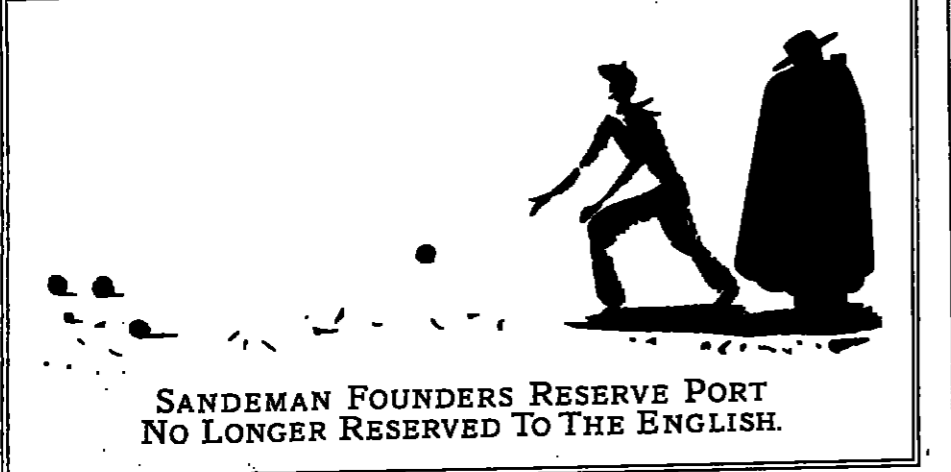
The Associated Press
MADRID — President Mario Soares of Portugal arrived Monday at the head of a large delegation on a weeklong visit to Spain aimed at reinforcing commercial, cultural and political ties between the two countries.
Since 1986, economic relations between the countries have flourished. Spain is now Portugal's second-largest client for exports, behind West Germany, and is moving to replace Britain as the leading investor in Portugal. Portuguese exports to Spain rose 78 percent last year to 71.6 billion escudos (\$511 million).

Legislature Chief Fired in Mongolia

The Associated Press
BEIJING — Bat Ochiryn Altangerel has been dismissed as chairman of the Mongolian People's Great Hural, the Mongolian legislature, the official Chinese news agency Xinhua reported Monday.
Xinhua said Mr. Altangerel, 53, was dismissed at a meeting of the Hural on Friday. It said the meeting did not disclose the reason for his removal from office.

Greece Mail Strike Resumes

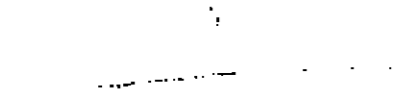
Reuters
ATHENS — Postal workers resumed a strike in Athens on Monday, disrupting Christmas mail, as two million workers prepared for a nationwide general strike Tuesday.



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Technology Quarterly

Issue No. 3

DEPARTMENTS

Workplace 8

Fiat's Ternoli engine plant was a technological breakthrough when it opened in 1985. Next month, the company will take innovation a step further with startup of a fully robotized body and final assembly plant.

Computers 8

After Wall Street's "Black Monday," instant analysts seeking a scapegoat were quick to point to computers. But behind the machines, there is man.

Developments 9

The world's first fusion reactor moves closer to reality with a multi-nation, East-West agreement to join forces — and resources — on an experimental design.

Business 10

Air express companies are in the midst of a technological revolution as they race to get your packages from there to here, faster and more reliably. Meanwhile, European and Japanese companies are pushing ahead with development of cinema quality, high-definition television.

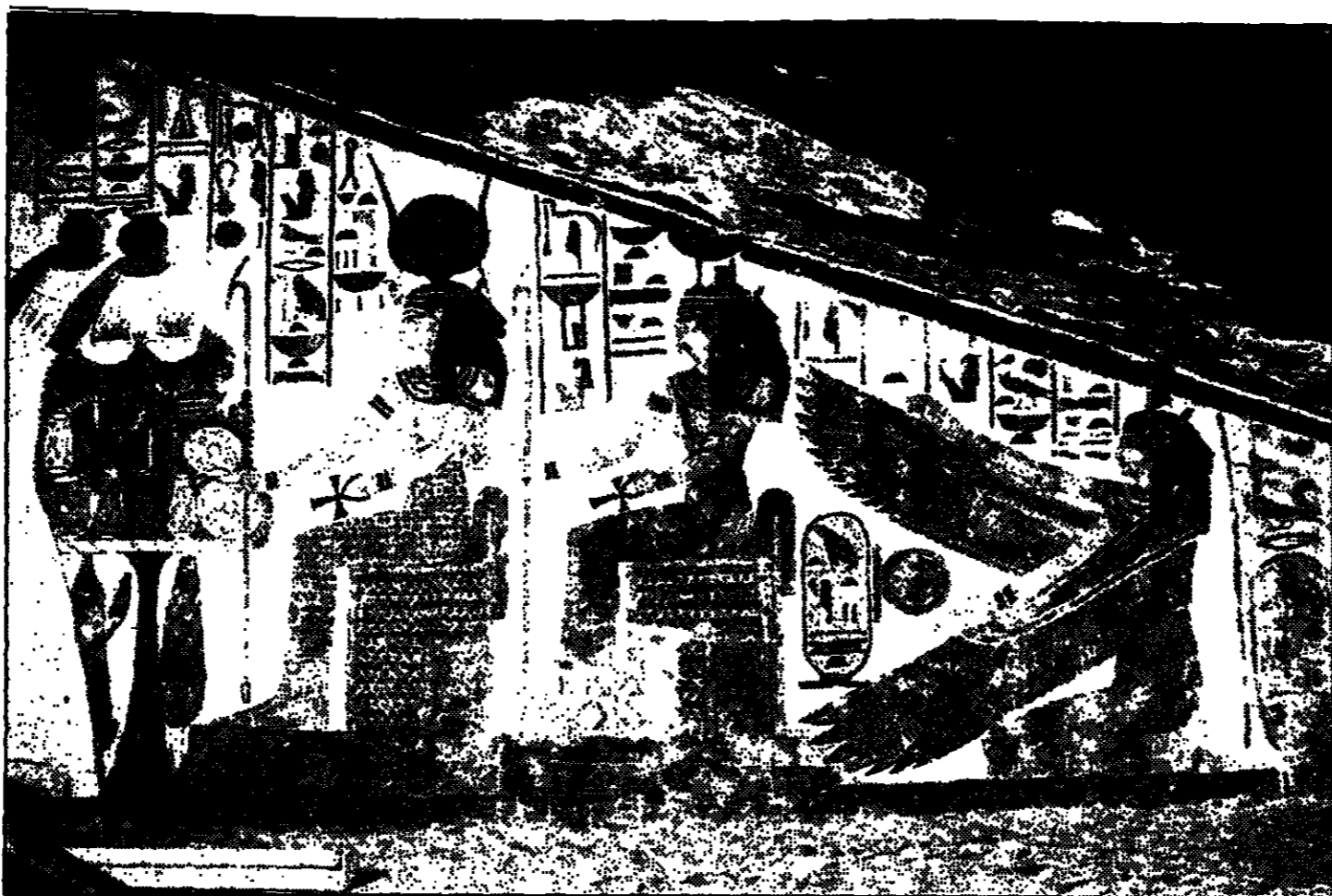
Research 11

Two Japanese companies have developed a wafer-thin battery that could be used in "smart" cards. The Pentagon is backing research in gallium arsenide integrated chips. In Notebook.



Next Issue

Some countries fare better at fostering the research environment that will result in tomorrow's technological breakthroughs. Is there more to their success than cold, hard cash? These and other issues on March 16, in Technology Quarterly.



Damaged wall paintings in the Luxor tomb are being studied with X-ray diffractors and electron microscopes.

Man, Machines Restore a Measure Of Life in the Tomb of Nefertari

By Souren Melikian

LUXOR, Egypt — In a few years, if all goes according to plan, the first visitors other than archaeologists, scientists and restorers will walk down into the funerary chambers that were dug out, some time after 1255 B.C., on a hillside at Luxor, in Upper Egypt. The embalmed body of Queen Nefertari, "Great Royal Wife, Lady of the Two Lands, Appearing to the Gods, the Beautiful-Faced One..." was deposited there. But it had long vanished when Italian archaeologists opened the tomb in 1904.

Few tourists will suspect that without modern technology they might not have been able to set eyes on the mural paintings celebrating the main wife of Ramses II.

They will gaze at brightly painted scenes in a miraculous state of preservation, which for the greater part have come down to us with their outline and color scheme unchanged over 3,250 years or so, during which they survived at least

New tools offer unprecedented information.

one break-in, in ancient times, possibly about the Roman period.

More importantly, they have survived substantial damage since the tomb was discovered by Ernesto Schiaparelli. The causes of the damage have varied from kicks by passing visitors, detaching bits of plaster, to clumsy "restoration" work, including crude overpainting. Recent changes of climate in the Luxor area noted by a Canadian team from Toronto University, which investigated the tomb from 1977 to 1981, have also worried scientists.

Above all, a slow but ominous transformation of the painted surface appeared to be under way. Years were wasted. During this time, amateur-

ish reports were made, and, to quote two Egyptian officials, "scientifically motivated surveys and exploratory missions... produced only general memoranda." It is probably no exaggeration to say that the intervention of the Getty Conservation Institute turned the tables and rescued one of the most precious heirlooms of the Ancient World.

Two key men made this possible: Ahmed Kadry, who was appointed director-general of the Egyptian Antiquities Organization in 1977, and Luis Monreal, who became the director of the Getty Conservation Institute in 1985.

Mr. Kadry was first made aware of the urgency of the problem by the Cairo University Report published in July 1980, which discussed, among other problems, the infiltrations of salt-laden rainwater. Three Canadian reports, particularly "Chemistry and Physics in the Tomb of Nefertari" and "The Internal Climate of Nefertari," deepened his anxiety in the face of a lack of funds and the inertia of international organizations.

It is at this juncture that Mr. Monreal appeared. A trained archaeologist and art historian, who was secretary-general of the International Council of Museums (ICOM) from 1974 to 1985,

Continued on page 11

New Radar Systems Peer Farther, Hide Their 'Signatures'

The USS Stark incident showed dependency on radar sensors and their deficiencies.

By John A. Adam

WASHINGTON — Radar sensors on the AWACS sentry aircraft flying oval patterns over the Gulf last May 17 detected an unknown aircraft around 7:55 P.M. The crew designated the blip "Track 2202" and alerted U.S. ships in the area through the Navy Tactical Data System. There was no immediate cause for alarm.

As the aircraft headed farther south, AWACS updates on Track 2202 became more frequent, and radars and other electronic apparatus on ships confirmed the blip to be a single Iraqi F-1 Mirage fighter flying about 3,000 feet (914 meters) above the water.

Around 9 P.M., the lone Iraqi pilot switched on his Cyrano IV fire-control radar to search for targets abetting Iran. Crewmen of the USS Stark, hunched over luminescent screens in the darkened combat information center, picked up the emissions and realized that the fighter was within striking distance.

The rest is known all too well. Through a series of blunders, the Stark failed to ward off two radar-guided Exocet missiles fired by the Iraqi plane. Remarkably, the launchings of the missiles apparently went undetected by the ship's various radar operators.

The navy's report on the incident was released in October. The version sanitized for the public masks out all sections involving the performance of the Stark's radars, leading some readers to conclude that human error was entirely to blame. But reading between the lines makes it apparent that glitches in the ship's radars and electronics may have contributed to the disaster, as the Stark's former captain, Gleam R. Brindel, contends.

The missile "wasn't seen on any of

the ship's radars," Captain Brindel says. "If the sensors would have divulged the things they should have, then I'm sure my TAO [tactical action officer] would have taken additional measures."

The Stark controversy not only shows how dependent ships, aircraft and missiles are on radar sensors but also points to deficiencies in some of today's systems. Most search radars like those on the Stark, which belongs to the navy's newest class of frigates, rely on mechanically steered antennas that re-scan an area every few seconds, a relatively long time in many battle situations.

The slow scan-time problem is exacerbated when radar is called upon, to do more chores, from navigation to tracking of hostile and friendly forces to directing missiles to their targets. Is the stalwart sensor, relied on since World War II, still up to the job?

RADAR (radio detecting and ranging) is often preferred to "passive" infrared or optical sensors because it measures distance accurately and can therefore be used to distinguish target range. It has the added benefit of long-range detection and the ability to see no matter what the weather. But its strength is also a military liability. By emitting signals, radar often gives away its identity because it has a distinctive "signature" based on its transmission parameters.

Passive sensors, those that rely solely on receiving emissions from potential targets, are often good for identifying targets but cannot measure range well. Without knowing the emitter's strength, it is impossible to determine how its signal was affected by distance. The U.S. military now favors a mix of "active" radar and passive sensors to monitor its adversaries.

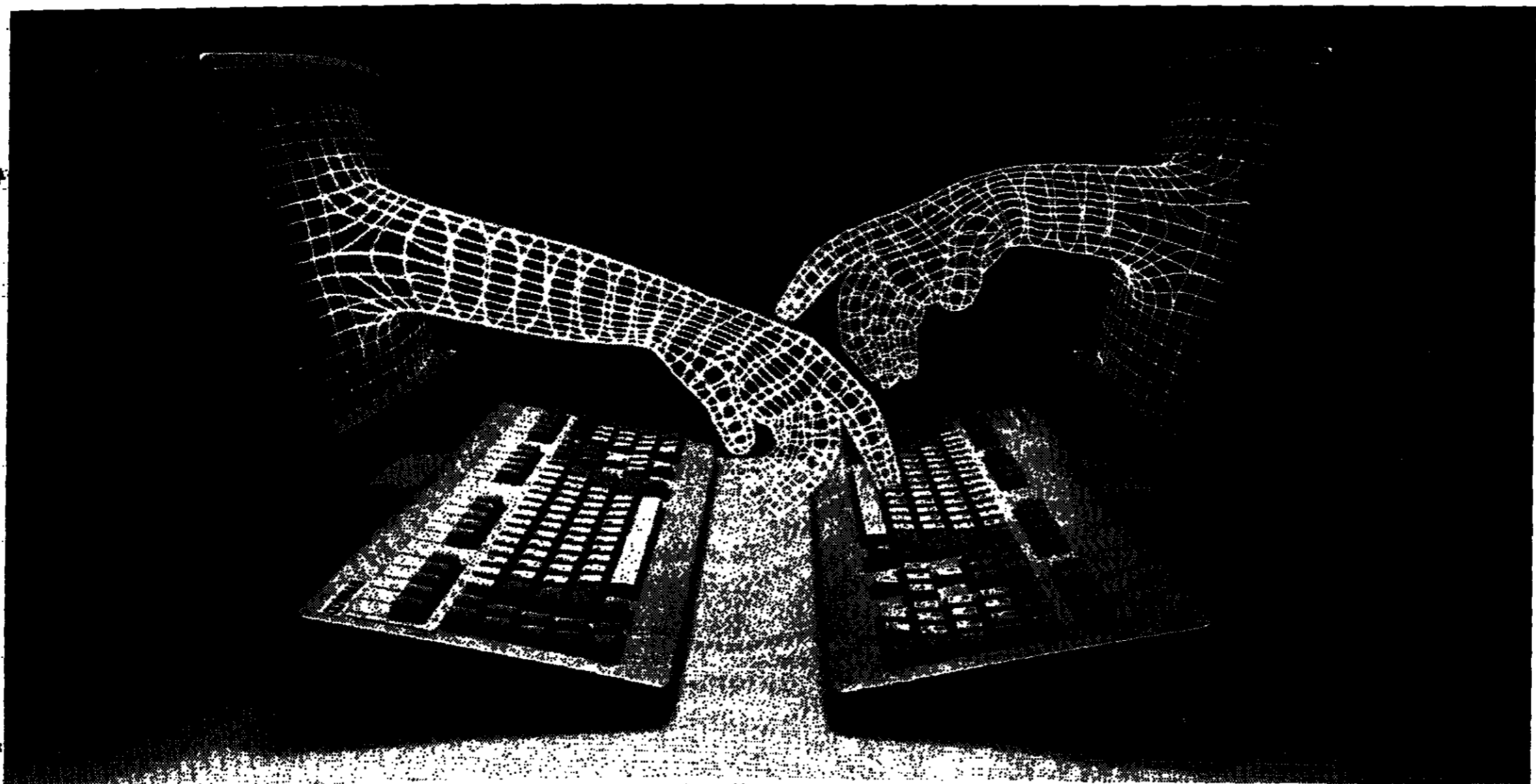
New radar systems range from colossal over-the-horizon backscatter radar, which bounces waves off the ionosphere to detect aircraft as far as 2,000 miles (3,232 kilometers) away,

Continued on page 10

JOHN A. ADAM is an associate editor of IEEE Spectrum, a monthly publication of the Institute of Electrical and Electronics Engineers. He wrote this article for The Washington Post.

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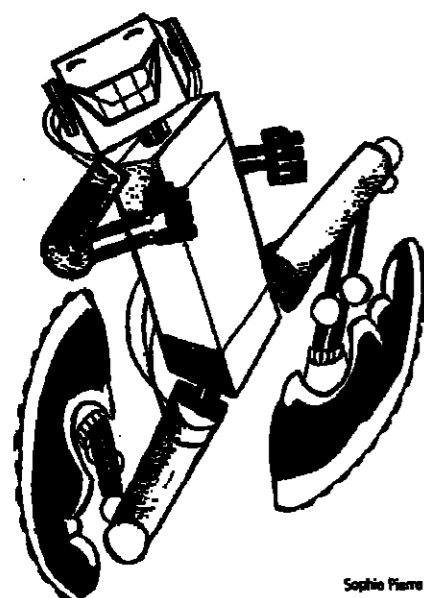
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Technology Workplace

Robotized Fiat Plants Look Toward the 'Disposable Car'



Leggy Robots Get New Gait In Lab Room

NEW YORK — Although there are robots that move around American factories on fixed tracks or computer-controlled vehicles, most are fixed firmly to the floor.

Things are livelier in the laboratory. A handful of researchers are slowly chipping away at the formidable challenge of mounting robots on reasonably nimble legs. One research team led by Professor Marc Raibert at the Massachusetts Institute of Technology recently succeeded in getting a quadruped robot that formerly tottered to bound across their 55-foot (16.7-meter) room.

The goal is the opposite of Henry Ford's Model-T.

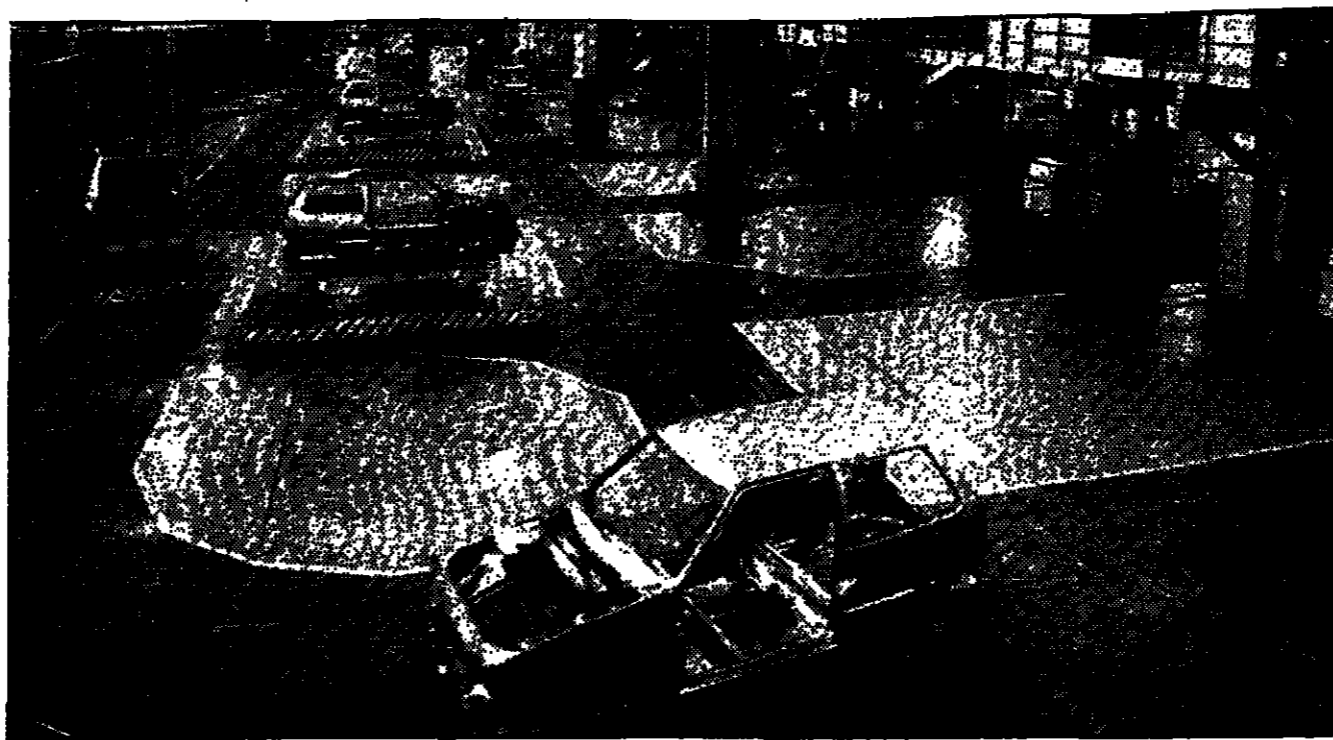
By Henry Tanner

TERMOLI, Italy — When it was opened in March 1985, the Fiat engine factory south of this small fishing town on the Adriatic coast was a technological breakthrough.

Built to produce a new engine for small cars — the FIRE-1000, standing for Fully Integrated Robotized Engine — it marked, according to Fiat, the first successful attempt by an automobile manufacturer to design and develop a new factory and a new engine together at the same time, shaping each for the best advantage of the other.

"We designed the technology to produce this engine, and we developed the engine to be produced by this technology, with the best possible combination for both," said Paolo Marinsek, the young aeronautical engineer who is the plant's director.

Leading a visitor past a mile-long snaking row of diversely colored, odd-shaped and seemingly unattended machines in perpetual motion, he said, "You imagine how excited we were. This had never been done before; we put the machinery down on the grass and built the factory around it."



In the "robogate," big, gate-shaped robots take in auto body parts and turn out fully welded bodies.

in automobile manufacturing, Fiat officials say, biting their tongue to keep from using the immodest word "revolution."

Both concepts were developed and tested at Mirafiori, the company's sprawling main plant in Turin. It took three years of experimenting before Termoli was ready for construction and at least as long to lay the groundwork for the new facility in Cassino, which has been producing the Ritmo.

There is a logic in progressing from Termoli to Cassino because engine production lends itself more easily to robotization than most other phases of automaking.

One of the secrets of Termoli was that the FIRE-1000 engine was designed to have almost a third fewer component parts than conventional engines, namely, 273 rather than the 363 of previous standard Fiat engines.

By contrast, the process of final assembly in Cassino may involve as many as 5,000 variations, depending on styling, options and finishing touches, in response to constantly changing consumer tastes, officials say.

Mirafiori and Rivalta, the two factories in Turin, remain the hub of the group's automobile manufacturing operation.

They made their own first leap into high technology in 1978, when point spraying and spot welding were robotized, the latter in an installation called "robogate" because its big, gate-shaped robots swallow the disconnected parts of a car body and moments later, in a burst of sparks, spit them out as fully welded bodies.

This was the foundation for the launch in

1983 of the Uno, Fiat's first experience in developing a new factory and a new product simultaneously as a single concept, at a total cost of about \$1 billion.

Now the plan is to close the industrial cycle and bring the new technologies of Termoli and Cassino back to where they started, in Mirafiori, for the production of the successor to the Uno.

Engineers at Termoli and Mirafiori are working on the adaptation to other engines of the robotization methods used for the FIRE-1000.

Also in the development stage is a new facility in Termoli for computer-steered robotized production of gearboxes, using more than 180 different robots. This will replace the conventional gearbox production plant next to the new engine plant. The robotization of gearbox production is more difficult than that of engines because it involves many more moving parts, according to Mr. Marinsek.

Coman, the Fiat group's own manufacturer of robots and robotized systems, has played a key role in all these innovations. In Termoli, Cassino and the two plants in Turin, it has designed systems using its own robots and those of many other manufacturers. It has sold its systems to other automakers, including General Motors, Toyota, BMW, Ford, Europe and, most recently, Jaguar.

From Mirafiori (and the Uno) to Termoli, to the new Tippo plant in Cassino and back to Turin for the Uno's successor in the 1990s, the guiding principle is always the same, Fiat executives say: maximum flexibility.

The goal is the opposite of Henry Ford's

Model-T, they say. Instead of the largest possible number of cars to be produced by the same machinery, they are trying to come up with a technology that permits them to change from one variation to another, and even from one model to another, in the shortest possible time at the smallest cost.

They point out that Lancia Thema and Fiat Cronas are taking turns being assembled by the same machines at Mirafiori. At various intervals in the factory, Coman engineers are supervising the installation of new machinery that will make such changeovers quicker and more commonplace.

Fiat, says one of its executives, has pioneered the "pessimistic" approach to automobile production.

The reasoning goes like this: "We are not Japanese, we are in Europe, we know the market is limited and will probably shrink. The goal, therefore, is not to produce the greatest number of cars most cheaply but to get the lowest possible break-even point at which we can hold production of one model, or one variation of a model, and still be profitable."

Japanese factories, he said, may be producing anywhere between 6,000 and 8,000 cars a day; the Uno, Fiat's best-selling car, is produced at 3,200 a day.

Fiat executives decline to name the break-even point for the Uno. But it is known that the \$1 billion investment for the model was amortized in less than three years. The group now produces between 25 and 30 cars per worker per year, not counting the

Alfa Romeo plants that were added to the group earlier this year. The figure was 14 cars per person a year in 1981.

The group has formed separate joint ventures with IBM and Digital in a bid to achieve an advanced system of Computer Integrated Manufacturing embracing all its operations.

Cars are increasingly like household appliances, an industry analyst said, "they are supposed to be inexpensive and to have a reasonably long lifespan with a minimum of maintenance and repairs, and only maximum automation can produce this and still reduce the price."

"They are trying to invent the disposable automobile," said a banker dealing with car companies.

At Termoli, the production lines are switched on at 6 A.M. Monday and keep running until 6 A.M. Saturday. The workforce of 900 men and women work around the clock in three daily shifts for five days.

They operate computers and man testing stations and other islands of human activity along the more than 2 kilometers of machining and assembly lines.

In between the human islands, the robots of different shapes and colors with articulated arms and fingerlike claws move incessantly and in virtual silence; they select components, lift them, turn them around, lower them into the right position and insert them delicately into a bigger part that then moves on to the next robots.

A lighted panel above the entrance to the headquarters building registers the daily production. At 17:13 P.M. the other day it stood at 1,207 engines for the day.

TERMOLI, halfway between Pescara and Bari on the Adriatic coast, is part of an agricultural region, although better off than many of the other southern regions, it is unmistakably part of the Italian South.

The workers have been recruited locally. Many of them are women, and for most of them this is their first industrial job. They go through a training period of eight months.

"Many find it at first more difficult than their counterparts in an industrial city," said Mr. Marinsek.

The factory has become a point of local pride. Sandro Pertini, when he was president, came to visit. The king of Sweden was here recently, and Japanese delegations just keep coming.

Mr. Marinsek, who is 36, has returned the compliment and gone to Japan. He concluded that his plant was at about the same level of automation in some advanced as the Japanese plants and "more advanced than they in others." But worker productivity is still higher in Japan, he said. "The average age of our worker is 47, in the Japanese plants it is 32; they live in an unbelievable hurry."

HENRY TANNER is on the staff of the International Herald Tribune.

World's Plan to L...

By Robin Herman

PARIS — The four world heavyweights in fusion power research — the Soviet Union, the United States, the European Community and Japan — have agreed to develop a joint program to build a prototype fusion reactor by the year 2050.

The project, titled the International Thermonuclear Experimental Reactor, would be the successor of an earlier demonstration reactor that was to be built in the 1970s but never started.

ITER is expected to take three years to design, and cost about 10 billion dollars to build. The design work will be shared equally among the four nations. When the reactor is built, it will be operated by a group of scientists from the four countries.

The design team was headed at the Paris Institute of Physics at Grenoble, France. The Japanese machine will be the basic form of the reactor first planned in 1974 by the International Atomic Energy Agency.

The design team also included the French Atomic Energy Commission at Gif-sur-Yvette and the Italian Atomic Energy Commission at Bologna.

The reactor will be a tokamak, a toroidal chamber with a plasma confined by a powerful magnetic field. The plasma is heated to a temperature of 100 million degrees Celsius, at which point the nuclei of hydrogen atoms fuse together, releasing energy.

Hong Ko

By Gary Aderman

HONG KONG — As elsewhere in Asia, the electronics industry in Hong Kong has grown rapidly in recent years, becoming an essential ingredient in the territory's overall mix of exports. Last year, electronics manufacturers accounted for almost 20 percent of Hong Kong's overseas trade, valued at \$2.3 billion.

But the future for Hong Kong's second largest industry is now uncertain. Foreign entrepreneurs are adopting new strategies to compete in a global market. Unlike the territory's garment and textile sectors, electronics manufacturers are not traditionally based in Hong Kong.

Advertisement for Minolta EP370Z copier. Includes headline 'IT'S SO SIMPLE TO IMPRESS YOUR SECRETARY WITH AN INTELLIGENT DECISION.', a list of features (e.g., power compo A3 plain paper copier), and the Minolta logo at the bottom.

Advertisement for 'Technology Computers'. Features headline 'When Computers Become Scapegoats', an illustration of a computer system with various components labeled (Processor, Memory, Input/Output Unit, Disk Controller, Tape Controller, Broker Terminals), and several sub-articles on computer redundancy and PC stocking stuffers for Christmas.

Handwritten Arabic text: كذا من النرجل

Technology

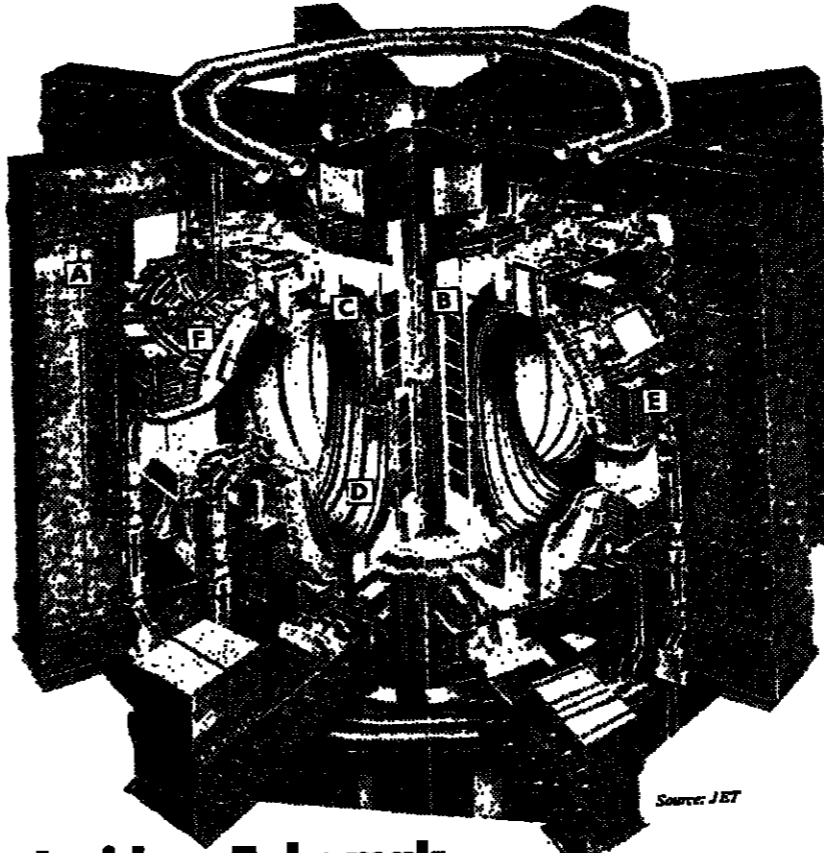
World's Top Research Nations Plan to Design Fusion Reactor

By Robin Herman

PARIS — The four world heavyweights in fusion power research — the Soviet Union, the United States, the European Community and Japan — have agreed to design together what would be the world's first nuclear fusion reactor.

The cooperative agreement on ITER was reached in October in Vienna and is expected to be ratified without problem by the governments involved. Among the representatives was Yevgeny P. Veikhov, science adviser to Mikhail S. Gorbachev and a longtime proponent of international collaboration in this very expensive branch of physics.

that the agreement would not commit any of the partners to actually building the machine. While the U.S. Department of Energy has been encouraging international collaboration as a way of shoring up declining fusion research funds, the Department of Defense has been nervous about possible technology leaks to the Soviet Union.



Inside a Tokamak

A cross-section of the Joint European Torus, the most powerful tokamak yet, reveals the workings of current fusion experiments. A iron transformer core connects primary current to plasma through B winding circuit coils; C toroidal field coils produce magnetic field that positions plasma; D vacuum vessel holds plasma; E outer poloidal field coils; F mechanical structure.

Oxford Stores The Language In a Gigabyte

By Francis X. Clines

OXFORD, England — Gigabyte is the latest word at the Oxford English Dictionary, a measure of the 1 billion bytes needed for what will be a major event in the history of the language — for a romp across the fluorescent fields of the modern computer.

Hong Kong Electronics Makers Map Survival Strategy

By Gary Aderman

HONG KONG — As elsewhere in Asia, the electronics industry in Hong Kong has grown rapidly in recent years, becoming an essential ingredient in the territory's overall mix of exports. Last year, electronics manufacturers accounted for almost 22 percent of Hong Kong's overseas sales, which totaled \$20 billion.

producers, who have long accounted for about 40 percent of exports, electronics manufacturers now appear trapped between the giants of Asia — South Korea and Taiwan — and the would-be giants — Malaysia, Thailand and others.

electronics centers like Japan and South Korea, which make the same items and are protective of their home industries, businessmen said.

man of an industry advisory committee to government, said, "China will take 10 to 30 years to develop the skills Hong Kong has in product development, production management, quality assurance, financing, sales and marketing."

semiconductor companies such as Motorola and Sprague of the United States plan major Hong Kong investments, picking up the local slack.

Advertisement for BASF featuring a large image of the Earth from space. Text includes: 'Progress through worldwide Synergy.', 'BASF The Spirit of Innovation', and 'BASF' at the bottom right.

Technology

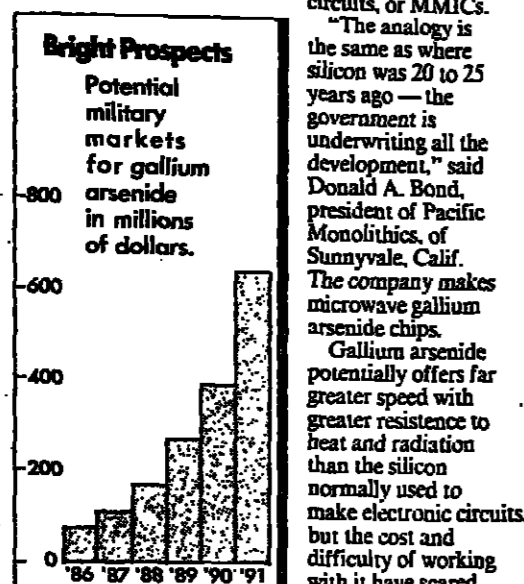
NOTEBOOK

'Paper' Battery

TOKYO — Two Japanese companies have succeeded in producing electrolyte, the chemical mixture inside batteries, in paper form, allowing the manufacture of batteries less than 0.1 millimeter (0.004 inches) thick.

Speedier Chip

SAN FRANCISCO — The Pentagon is pushing suppliers toward gallium arsenide integrated circuits, combining many components into a single chip that can be reliably mass-produced.



arsenide integrated circuits will allow sophisticated radar systems — now the size of buildings — to be made small enough to fit into planes.



Scientists monitor microbiology outside tomb to measure impact of visitors.



Conservator takes color readings on wall paintings to detect changes.

Man, Machines Restore Measure of Life

Continued from page 7

Mr. Monreal had worked on Egyptian archaeological sites in the 1960s and had been involved in the reorganization of the Egyptian Museum in the 1970s.

The two men got the Nefertari conservation project started in September 1986, less than 15 months after Mr. Monreal's appointment, something of a speed record for this type of undertaking.

In the meantime, what is to this date the most advanced conservation laboratory had been set up. It was running under the scientific direction of Frank Preusser, one of the top men in the field of scientific conservation who had been lured away from the Dörner Institute in Munich.

Mr. Preusser has a keen visual understanding of art and does not allow technology to run out of bounds against common sense. He established a sound relationship with Italy's leading fresco restorer, Paolo Mora of Rome, who had been called in to wield the tools and personally control every physical treatment of the painted surface.

What Mr. Preusser set out to do, as it appears in retrospect, was to give Mr. Mora assurances that whatever the restorer would be doing would be compatible with the environment of the tomb and the physical characteristics of the paintings.

Directed by Mr. Preusser, a team including Egyptian and Western scientists analyzed the materials used to execute the wall paintings, which include the pigments, the plaster coating and the binding medium. For pigments, the team used X-ray diffraction. The diffractometer made available by the Getty Conservation Institute is a technical development that is barely five or six years old.

The attention of the Getty team was focused particularly on the salt. The highly sophisticated equipment of the Conservation Institute at Marina del Rey in California includes an electron-beam microprobe — a scanning electron microscope using electrons instead of visible



Inside the tomb's funerary chamber, workers prepare surfaces for the next phase of restoration.

light. While the basic device has been in use for 15 years, recent progress has given it a higher resolution that allows magnification up to 100,000 times.

Looking into the pores of the plaster for the salt crystals, varying in size from a hundredth to a tenth of a millimeter, that they expected to see, the technicians found that there were none. The only crystals were normal clay minerals.

This was a major discovery. Knowing that there was no salt in the plaster itself meant that the restorers would be able to consolidate it directly by impregnating it with a consolidating agent, an area in which the Getty Conservation Institute has probably done the most advanced research work anywhere.

The other advanced technique used by the institute in the tomb of Nefertari involved color-measuring. Mr. Preusser says the equipment came on the market only three or four years ago, and while the idea is relatively old, the machinery is revolutionary.

Portable and computerized, the apparatus allowed the team to do up to 1,500 color measurements in six working days, including the photographic documentation and the data reduction. With traditional equipment, this would have taken one to two months. Staff being scarce, speed was essential.

At a conference held in Cairo from Nov. 17 to 20, as a conclusion to the first phase of the Nefertari project, scientists compared notes in their respective areas. (The first phase dealt with less than 10 percent of the painted surface; a second phase will involve the conservation of the entire tomb.)

THE investigation had started on the assumption that the salt coming out of the rock, the major cause of deterioration, was the result of periodic rainfalls. These were thought to have taken place at very wide intervals, perhaps 100 years or more.

This is a vital indication that the restorers will be in no danger of seeing their work jeopardized in the event of a catastrophic rainfall in 10, 20 or 50 years. The biological survey undertaken by a Japanese biologist, Hideo Arai, revealed "a surprisingly dry environment." He be-

lieves that the Egyptian blue of the tomb ceiling has turned black in some areas, possibly as a result of micro-organisms. Minute fungi from the Nefertari tomb have been grown in a Tokyo laboratory to further verify the hypothesis.

Having collected these data from September 1986 to April 1987, the Getty Conservation Institute started the treatment phase at once. To consolidate fragments of plaster in imminent danger of falling off as a result of vibrations caused by tourist traffic, a light concentration of an acrylic consolidant has been applied on the back of each flaking fragment.

The larger pieces have been fixed with thin strips of Japanese paper, 10 by 2 centimeters (3.8 by .78 inches), which make some of the walls look as if they had been covered with Band-Aids, a harmless process light years ahead of the thick gauze applied with organic glue over the paintings in the late 1960s. Mr. Mora's team has now succeeded in removing the gauze with no loss at all.

Mr. Monreal estimates that in two years the restoration work should be completed. Thus, at a cost that is minimal compared with the overall Paul Getty Trust budget, one of the most remarkable artistic undertakings since World War II is being carried out.

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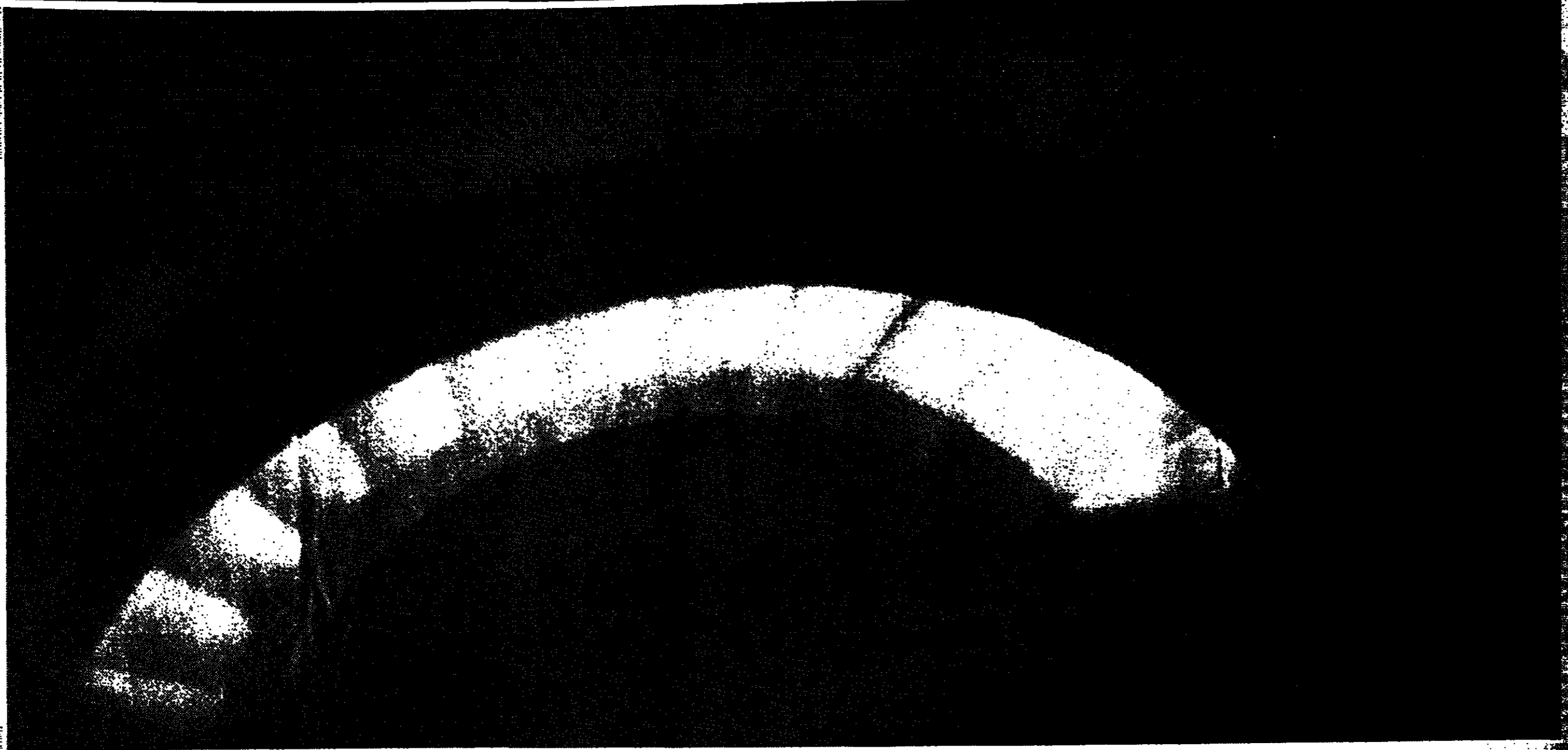
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The acquisitions of AEG, Dornier

and MTU have provided the company with a broader, even more forward-looking base to build on. Already new opportunities are taking shape in the development of the motor car. Daimler-Benz knows that success in the markets of the future requires that they draw inspiration from the

most diverse fields of technology and make full use of every available intellectual and economic resource. A heritage of quality consciousness combined with today's inventiveness and access to new technology puts the company into a unique position to embrace the future with total confidence.



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NYSE Most Actives table with columns for Volume, High, Low, Last, and Change. Includes stocks like Schlumberger, IBM, and Amgen.

Market Sales table showing NYSE 4 a.m. volume, NYSE new cons. close, Amex 4 a.m. volume, and Amex new cons. close.

NYSE Index table with columns for High, Low, Close, and Change. Includes Composite Index, Industrials, Finance, and Utilities.

Monday's NYSE Closing logo with text 'Via The Associated Press'.

AMEX Diary table with columns for Advance, Decline, Unchanged, Total Issues, and New Issues.

NASDAQ Index table with columns for Close, Change, Week Ago, and Year Ago. Includes Composite, Industrials, Finance, and Utilities.

AMEX Most Actives table with columns for Volume, High, Low, Last, and Change. Includes stocks like ECHO, Wmco, and WOLpin.

Dow Jones Bond Averages table with columns for Bond, Yield, and Change. Includes Bonds, Utilities, and Industrials.

NYSE Diary table with columns for Advance, Decline, Unchanged, Total Issues, and New Issues.

Odd-Lot Trading in N.Y. table with columns for Date, Buy, Sell, and Total.

Dow Jones Averages table with columns for Open, High, Low, Last, and Change. Includes Industrials, Transp., Utilities, and Comp.

Standard & Poor's Index table with columns for High, Low, Close, and Change. Includes Industrials, Transp., Utilities, and Finance.

NASDAQ Diary table with columns for Advance, Decline, Unchanged, Total Issues, and New Issues.

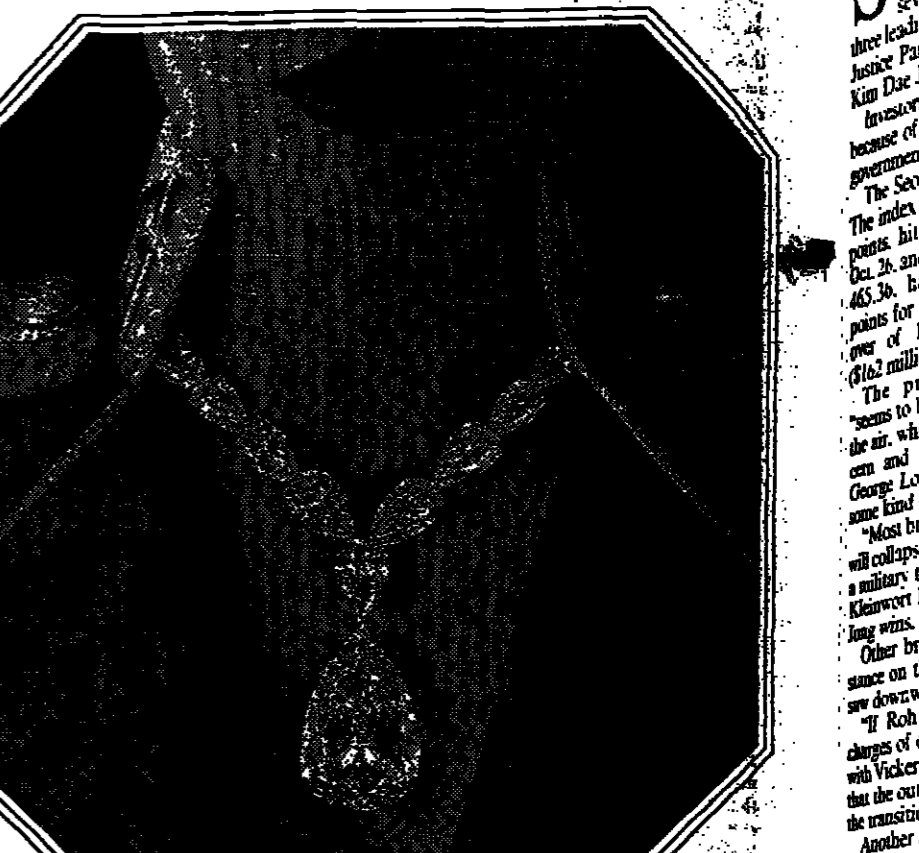
AMEX Stock Index table with columns for High, Low, Close, and Change.

Tables include the nationwide prices up to the closing on Wall Street and do not reflect late trades elsewhere.

Dow Soars 65 in Active Trading

NEW YORK — Prices on the New York Stock Exchange posted their best gain Monday in more than six weeks as enthusiastic investors shrugged off the weakening dollar and set their sights on a year-end rally. The Dow Jones industrial average, which rose 100.30 points last week, jumped 65.82 on Monday to close at 1,932.86. It was the blue-chip index's best gain since Oct. 29, when it added 91.51 points. Advances led declines by nearly a 3-1 ratio. Volume was 187.7 million shares, up from 151.6 million Friday. The New York Stock Exchange index rose 3.43 to 133.26, with the price of an average share gaining 78 cents. The market started strongly, gaining almost 17 points in the first half hour, and gathered momentum all day. Trade Latimer of Josephthal & Co. said the advance was partly, but not entirely, attributable to computer-driven program trading. "It's a combination of some speculation, some bargain-hunting, some futures-related activity and some activity related to institutions that need to put cash to work" before the end of the year, she said. Analysts said the market appeared to want to move higher regardless of the dollar's continued decline against other currencies. Market sentiment appeared to be affected by a strengthening conviction that prices are headed for a year-end rally, traders said. "This market wants to go higher for the rest of the year," said Eric Rudner, manager of

block trading with Mabon, Nugent & Co. He added that the weakened dollar eventually could sap the momentum, but that many traders were taking a wait-and-see attitude toward the currency's problems. Larry Wachtel, a market analyst with Prudential-Bache Securities Inc., said the advance Friday "set the psychological framework to withstand the weaker dollar this morning." He added that disarray evident among OPEC oil ministers meeting in Vienna, which sent oil prices plummeting Monday on world markets, also provided some support for stock prices. "Basically this is a market that's shown surprising resilience in the past week in the face of some bad shocks — especially the trade figure and the dollar," said Michael Metz of Oppenheimer & Co., referring to the record monthly U.S. trade deficit of \$17.6 billion reported Thursday. "It's almost as though it's looking for an excuse to go higher." Schlumberger was the most active NYSE-listed issue, closing unchanged at 29. Southern New England Telecom followed, up 1 to 46, with Texaco next, adding 1/4 to 35 3/4 as its shareholders and creditors discussed a proposal for a \$3 billion settlement of the oil giant's \$10.3 billion dispute with Pennzoil. Pennzoil fell 4 1/2 to 74 1/2. International Paper jumped 3 1/2 to 45 1/2 after it said it will boost container board prices. Other paper issues followed, Stone Container adding 3 1/4 to 35 1/2, Great Northern Neokosa rising 2 1/4 to 44 1/2 and Scott Paper up 4 to 68 1/2. AT&T added 1 to 28 1/2. IBM gained 5 to 115 1/4.



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Large table of stock prices (A) including companies like AAR, AGC, AMBA, and various financial institutions.

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Table of stock prices (AQ) including companies like AAR, AGC, AMBA, and various financial institutions.

Vertical sidebar containing financial news, 'Current' rates, 'Interest' rates, and 'Money Rates' tables.

Monday's NYSE Closing

Tables include the nationwide prices up to the closing on Wall Street and do not reflect late trades elsewhere.

13 Month High Low Stock Div. Yld. PE 52 High Low Open Close

Table of stock prices for various companies including Alcoa, Alcan, Amstar, and others.

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U.S. Futures

Via The Associated Press

Season Season Open High Low Close Chg.

Table of U.S. Futures prices for Grains, Soybeans, and Corn.

Livestock

CATTLE (CBM) 4800 lbs. Cash per lb.

Table of Livestock prices for Cattle and Hogs.

Currency Options

PHILADELPHIA EXCHANGE

Table of Currency Options prices for various currencies.

Table of Food prices for Coffee, Orange Juice, and Sugar.

Metals

COPPER (COMEX) 36000 lbs. Cash

Table of Metals prices for Copper, Silver, and Gold.

Financial

U.S. T. BILLS (MM) 51 million - 91 days

Table of Financial prices for Treasury Bills and Bonds.

Table of International Futures prices for various commodities.

Stock Indexes

SP COMP. INDEX (CBM) points and cents

Table of Stock Indexes prices for S&P 500 and other indices.

Commodity Indexes

Moody's Commodity Index

Table of Commodity Indexes prices for various commodities.

Paris Commodities

SUGAR High Low Bid Ask Chg.

Table of Paris Commodities prices for Sugar, Cocoa, and Coffee.

London Commodities

SUGAR High Low Bid Ask Chg.

Table of London Commodities prices for Sugar, Cocoa, and Coffee.

Dividends

Company Dividend Per Amt Pay Rac

Table of Dividends for various companies.

Spot Commodities

Commodity Today Previous

Table of Spot Commodities prices for various commodities.

S&P 100 Index Options

Dec 11

Table of S&P 100 Index Options prices.

London Metals

Dec 14

Table of London Metals prices for Aluminum, Zinc, and Lead.

U.S. Treasuries

Dec 14

Table of U.S. Treasuries prices for various maturities.

DM Futures Options

Dec 14

Table of DM Futures Options prices for various currencies.

Business Round Steel Loss

Text article discussing steel industry losses and market conditions.

Management Buyout Offer

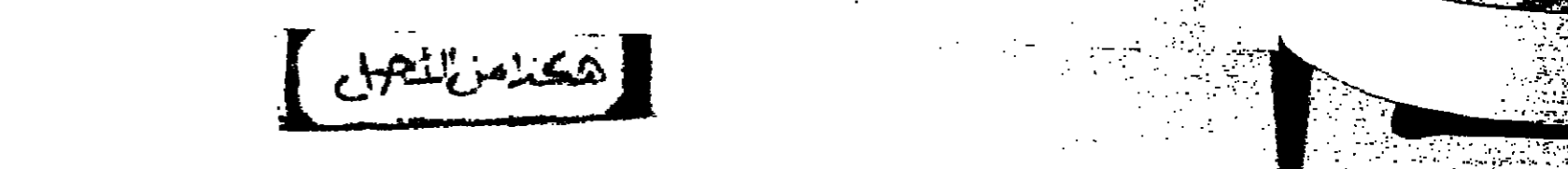
Text article discussing a management buyout offer for a company.

CANADA: Citizen

Text article discussing Canadian financial news and market trends.

ADD TO NEW

Advertisement for a gold investment product, mentioning 'As long as gold has been...'.



AMEX Closing

Tables include the nationwide prices up to the closing on Wall Street and do not reflect late trades elsewhere.

Table with columns: 12 Month High, 12 Month Low, Div. Yld. PE, etc. for various stocks like AMEX, AMEX, AMEX, etc.

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MARKETS: A
Exchange... But it's nonsense to say... The market... The market... The market...

INTERNATIONAL FUNDS (Quotations Supplied by Funds Listed) Dec. 14, 1987

Large table listing various international funds with columns for fund name, share price, and other details.

AMEX High-Lows

Table listing AMEX high and low prices for various stocks.

NYSE High-Lows

Table listing NYSE high and low prices for various stocks.

Floating-Rate Notes

Table listing floating rate notes with columns for currency, issuer, and rate.

Deutsche Marks

Table listing Deutsche Marks with columns for issuer, coupon, and bid/ask prices.

Pounds Sterling

Table listing Pounds Sterling with columns for issuer, coupon, and bid/ask prices.

E.C.U.

Table listing E.C.U. with columns for issuer, coupon, and bid/ask prices.

Japanese Yen

Table listing Japanese Yen with columns for issuer, coupon, and bid/ask prices.

Other Funds

Table listing other funds with columns for fund name and share price.

Be sure that your fund is listed in this space daily. Telex: Matthew GREENE at 613597 for further information.

MARKETS: After Collapse of U.S. 'Stock Machine,' Tinkering Lies Ahead

Exchange. "But it's nonsense to say it won't happen again. The markets reflect the fundamentals and psychology, and sometimes the psychology gets a little out of whack. You can never say that you'll never have a market collapse again."

Trading matters worse, some of the banks that lend money to these market makers reduced or cut off their lines of credit. Had that financing been halted long enough, the real "meltdown" that was narrowly averted might have occurred.



Robert Redford as Jay Gatsby: another speculative era.

ERA: Bull Run Paralleled Jazz Age

(Continued from Page 1) banker who was commerce secretary in the Nixon administration. "We are now understanding that that is not the case."

Monday's OTC Prices. NASDAQ prices as of 4 p.m. New York time. This list, compiled by the AP, consists of the 1,000 most traded securities in terms of dollar volume.

Table with columns: 12 Month High/Low, Div. Yld., Sales, High, Low, 4 P.M. Close, Net Change. Lists various OTC stocks like AAM Ed, ASA, Acadms, etc.

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explained that some dealers chose not to answer their telephones during the collapse or were so overwhelmed that many callers could not get through.

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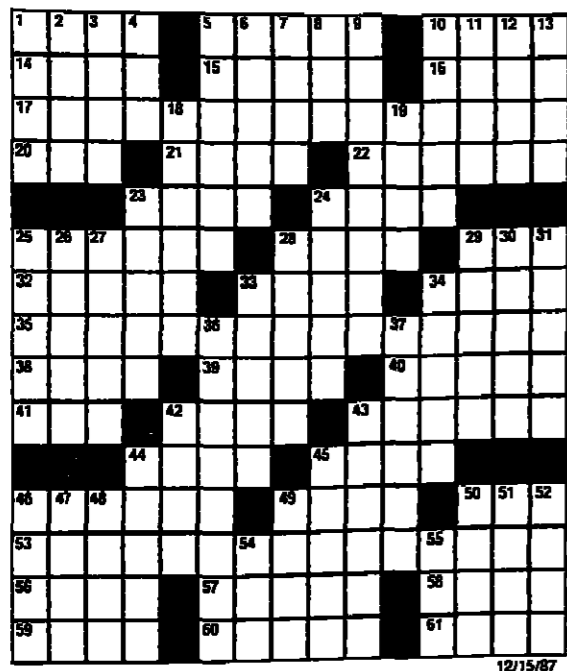
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ACROSS 46 Warning of... 49 Bit of ice... 50 Song introduced in 'Sammy'...

PEANUTS



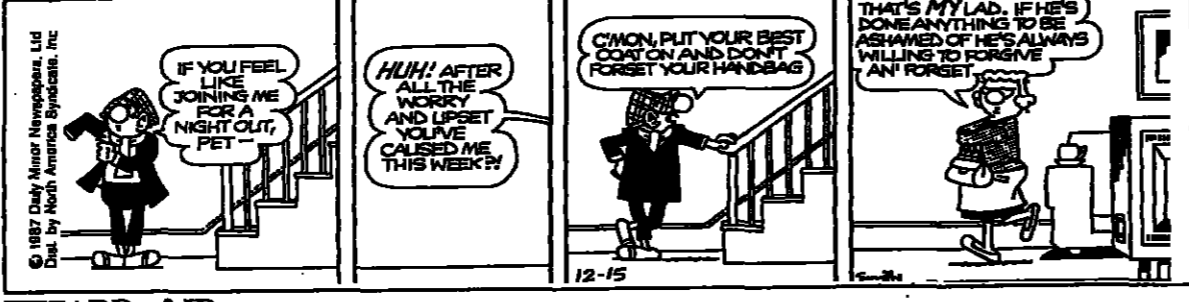
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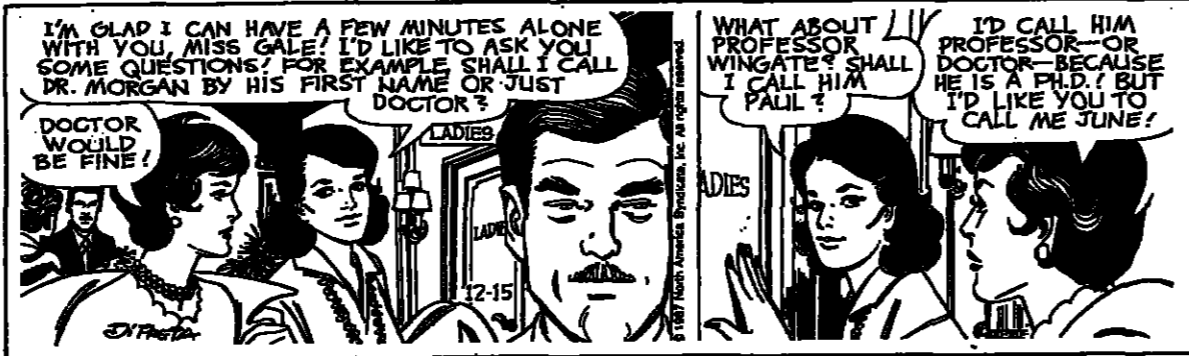
ANDY CAPP



WIZARD OF ID



REX MORGAN



GARFIELD



BOOKS

RED DOLL

By Juan Luis Cebrán. Translated by Philip W. Silver. 166 pages. \$15.95. Weidenfeld & Nicolson, 9 East 40th Street, New York, N.Y. 10016.

Reviewed by Richard Eder

FIFTEEN years earlier, Juan Altamirano had been one of a group of young Madrid intellectuals who put out an irregularly tolerated independent journal and who were arrested from time to time by Franco's police.

Altamirano is the principal character in the novel, whose theme is the uneasy accommodation of democracy with the old Spanish passions. Its author, Juan Luis Cebrán, is the

editor of Spain's leading newspaper, El País. He is a battle-scarred liberal and one of the architects of what, a dozen years after Franco's death, is still called the Democratic Transition.

Its most remarkable depiction is of the troubled conscience among those who knew the exhilaration, along with the risks, of being the democratic opposition under a dictatorship.

In the days of the illegal opposition, in the 1960s and early 1970s, it was not uncommon to hear Spaniards speak more or less in these words: "We shall miss Franco when he is gone."

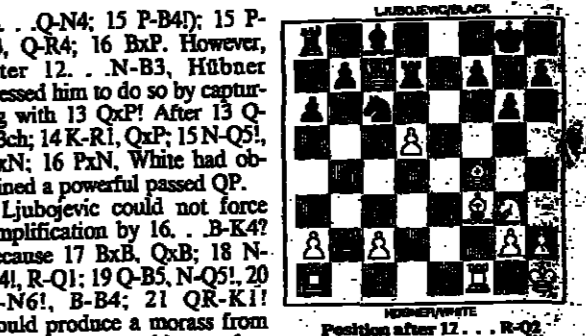
CHESS

By Robert Byrne

THERE is no reason in principle to object to hybrid openings, but the elements really have to go together.

Ljubovic could not force simplification by 16... B-K4? because 17 BxR, QxR; 18 N-K4, R-Q1; 19 Q-B5, N-Q5; 20 Q-N6, B-B4; 21 QR-K1!

On 11... Pxp: 12 BxP, Ljubovic did not want to lose R-Q8ch; NxR; 23 QxNch. B; 24 B-Q4 is decisive. But QNf with 12... Q-N3ch; 13 K-



queen file because 22... Q-B5 would be crushed by 23 P-B3; BxP or 23... QxP; 24 N-K2, Q-N5; 25 NxR, N-N; 26 Q-Q8ch 24 R-Q8ch!

He may have been looking for a coffee-house trap such as 30 R-Q7, R-K8mate. When that hope was lost, he gave up.

DENNIS THE MENACE



JUMBLE

A word puzzle section with a grid and clues. Clues include: 'Unscramble these four Jumbles, one letter to each square, to form four ordinary words.'

WEATHER

Weather forecast table with columns for Europe, Asia, Africa, Latin America, North America, Middle East, and Oceania. Includes high/low temperatures and weather conditions.

World Stock Markets

Table of world stock market closing prices in local currencies for Dec 14. Includes sections for Amsterdam, Frankfurt, London, Milan, Madrid, Paris, Rome, Singapore, Stockholm, Sydney, Zurich, and Tokyo.

See Paris

Table of stock market data for Paris, including various indices and company prices.

Singapore

Table of stock market data for Singapore, including various indices and company prices.

Toronto

Table of stock market data for Toronto, including various indices and company prices.

Seahawks Race in A

Seattle Seahawks... Even though only two weeks remain before the National Football League playoffs, it is possible to make sense of the Seattle Seahawks' Conference tie-breaker situation.

SCOREBOARD

Scoreboard table showing results for Football, Hockey, and other sports. Includes columns for team names, scores, and game details.

ART BUCHWALD
Upstaged by Raisa

WASHINGTON — Ronald Reagan got into bed and sighed, "Mikhail is really a nice guy." Nancy punched her pillow with her fist. "He's feisty but he has a sense of humor," the president went on. Nancy punched her pillow again. "Why are you doing that?" Ronald asked. "I can't believe it. I was publicly upstaged by a communist," Nancy said, hitting her pillow once more.



Buchwald

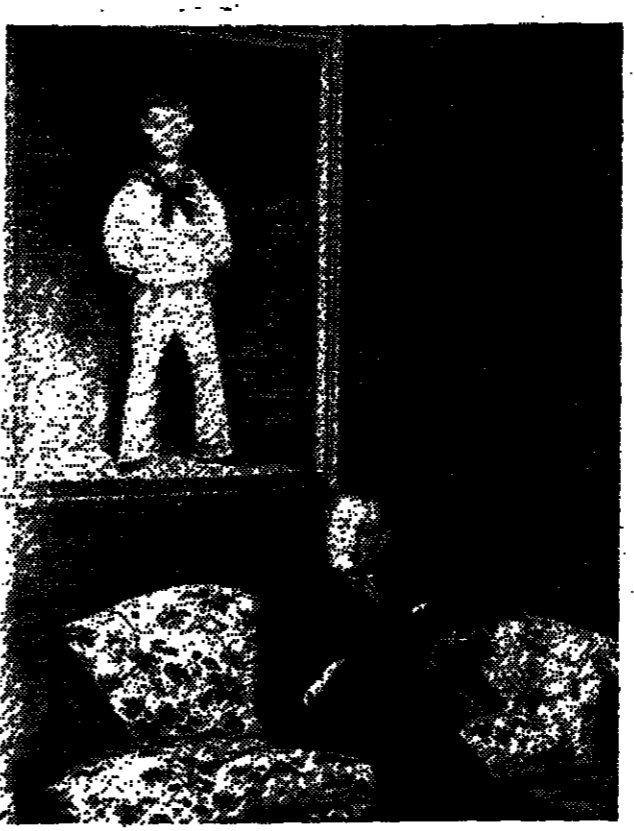
"I don't care what you call her, she humiliated me and she did it on purpose." "No one could humiliate you, Nancy." "How would you know? You were locked up in meetings all day and you had no idea what was going on outside."

"What did she do?" "For one thing she wouldn't let me know if she was coming to tea or not. I had egg on my face when I couldn't tell the press what time she was arriving."

"You know how Russians are when it comes to their tea." "Napoleon Flintlock Sold" LILLE, France — A New York antiques dealer paid \$146,000 for an auction for a miniature Flintlock rifle with a barrel decorated with tiny bees that once belonged to Napoleon II, also known as the King of Rome.

Henry Bernstein's Theatrical Life

By Thomas Quinn Curtiss International Herald Tribune PARIS — Henry Bernstein was one of the most successful French dramatists of his day. He wrote 50 plays between 1900 and his death in 1953. He did not, like his contemporary Sacha Guitry, take to the boards to impersonate his leading men, but he was always "on," though off stage. A dandy in the mundane whirl, he gave a continuous performance for more than half a century. His private life was not private. Among his mistresses were Coco Chanel and for a long spell Eve Curie, the daughter of Marie Curie.



Bernstein seated before his portrait by Manet.

He staged "Le Marché" in 1900. When Bernstein's unauthorized leave was forgiven and he returned to Paris he found himself a playwright much in demand. In 1911 the Comédie-Française accepted his play "Après moi!" This official recognition of an author who had deserted the colors infuriated Léon Daudet, editor of the relentlessly anti-Semitic "Action Française," who organized manifestations to halt its performance. Its premiere was the scene of a riot and when the play was repeated there were more disturbances. It was withdrawn.

latest contribution in Le Figaro. His new play was in six acts. "One more act than Racine," wrote the critic. "Racine!" Bernstein exclaimed, rolling his eyes in ecstasy. "His incomparable perfection! His concise dramaticity! His poetic eloquence! He has been my inspiration always!" Among American writers, he had good words for Hemingway, O'Neill and Dreiser. He was impressed by Jean Genet's literary quality but deplored his materials. He had known Zola. "A great spirit! Great spirit in the public area. The part he played in Dreyfus's defense has made him an immortal. As a novelist he was a long writer, not a master." More than 30 years after his death, Bernstein's work is being re-examined. Several playwrights of note have admitted their debt to his sense of form: Marcel Achard, Steve Passeur, Bernard Zimmer and, curiously enough, Jean-Paul Sartre. Last year Alain Renais made a film from his play "Melo," which was composed in the cinematic manner. The motion picture version prospered in France and abroad. Now there is a revival of another of his plays, "Le Secret," which has just opened at the Théâtre Montparnasse. First seen in 1913, it tells of the apparently contented and charming wife of a painter. But the woman is full of hate and hostility. She seeks to destroy the marriage of a newlywed couple, but is unmasked. Her noble husband forgives her and promises to cure her of her pathological urge to do harm. Anny Duperey, an actress of presence and versatility, impersonates the Janus-faced villainess with superb nuance and polished style. The play has been successfully cast and there is a remarkable characterization of the blundering bridegroom by Fabrice Luchini. The ingenious staging by André Voutsinas, a disciple of Lee Strasberg who conducts an acting school in Paris, transforms the script into brilliant theater, providing evidence that Bernstein at his best will soon return to favor.

PEOPLE

Lorin Maazel to Take Permanent Post in Paris

The American conductor Lorin Maazel was named Monday to be music director of the Orchestre National de France, and said he thought the role was his destiny. Maazel, 57, will take on the new job in August, while continuing as music director at the Pittsburgh Symphony Orchestra. In 1977 Maazel became the orchestra's principal guest conductor. The Orchestre National, founded in 1953, has been since 1973, Roland Faure, president of Radio France, also announced that the French conductor and composer Pierre Boulez will become the orchestra's "consultant for special events."

Bob Geldof returned to London Sunday after a 12-day tour of Ethiopia and Mozambique and warned of another famine. "We may see again those horrendous pictures and believe me if you do see them your conscience will be twinged," he said. Relief organizations, such as Geldof's own Band-Aid, are frustrated because wars in both nations have blocked efforts to get food to the starving. Geldof says he asked for a cease-fire the day he left Ethiopia.

Baron Hans Heinrich von Thyssen-Bornemisza de Kaszon, the Swiss multimillionaire looking for a permanent home for his 1,200-piece private art collection now in Lugano, said Monday he would announce the name of the recipient next year. Thyssen sought to report on the inauguration of an exhibition of 50 of the Old Masters belonging to his collection at the San Fernando Royal Academy of Fine Arts in Madrid.

A 41-year-old restaurant owner from Dublin ousted 147 other gamblers over three days of play to win \$132,000 in an open poker game in Las Vegas. Lorenzo Fuscaudi became the first non-American to win an event in the annual Grand Prix poker tournament at the Golden Nugget Casino, a week-long, 16-game competition.

The Duchess of York, the wife of Britain's Prince Andrew, won her helicopter pilot's wings on Monday, fulfilling a long-held dream of her husband's.

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NEARLY ST. JAMES, exceptional in high class building
PLACE ST MICHEL, beautiful old building
NEAR POISSONNIERE, 400 sq.m.
RUE DE PASSY, large & lovely studio
REAL ESTATE TO RENT/SHARE
SWITZERLAND
BAHAMAS
PARIS AREA FURNISHED
PARIS AREA UNFURNISHED
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ONE IN A MILLION LADY, 39 years old, divorced, 5'10", blonde hair, office work, flexible, motivated, sophisticated, etc.
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ACCESS VOYAGES
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